IN THE CLAIMS

(currently amended) A compound of formula (I) 1.

$$\mathbb{R}^3$$
 \mathbb{R}^4
 \mathbb{R}^7
 \mathbb{R}^7

(I)

or a salt, ester, or amide thereof;

where X is O, or S, S(O) or S(O)₂ or NR¹⁰ where R¹⁰ is hydrogen or C_{1-6} alkyl; R⁵ is a group OR¹¹, NR¹²R¹³ or SR¹¹ where R¹¹, R¹² and R¹³ are independently selected from hydrogen, optionally substituted hydrocarbyl or optionally substituted heterocyclic groups, and R¹² and R¹³ may additionally form together with the nitrogen atom to which they are attached, an optionally substituted aromatic or non-aromatic heterocyclic ring which may contain further heteroatoms,

R⁶ and R⁷ are independently selected from hydrogen or hydrocarbyl; R⁸ and R⁹ are independently selected from hydrogen, halo, C₁₋₄ alkyl, C₁₋₄alkoxy, C1-alkoxymethyl, di(C1-alkoxy)methyl, C1-alkanoyl, trifluoromethyl, cyano, amino, C2-5alkenyl, C2-5alkynyl, a phenyl group, a benzyl group or a 5-6-membered heterocyclic group with 1-3 heteroatoms, selected independently from O, S and N, which heterocyclic group may be aromatic or non-aromatic and may be saturated, [[(]]linked via a ring carbon or nitrogen atom, [[)]] or unsaturated, [[(]]linked via a ring carbon atom, [[)]], and which phenyl, benzyl or heterocyclic group may bear on one or more ring carbon atoms up to 5 substituents selected from hydroxy, halogeno, C₁₋₃alkyl, C₁₋₃alkoxy,

C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C₂₋₄alkanoyl, C₁₋₄alkanoylamino,

 C_{1-4} alkoxycarbonyl, C_{1-4} alkylsulphanyl, C_{1-4} alkylsulphinyl, C_{1-4} alkylsulphonyl, carbamoyl, \underline{N} - C_{1-4} alkylcarbamoyl, \underline{N} , \underline{N} -di(C_{1-4} alkyl)carbamoyl, aminosulphonyl, \underline{N} - \underline{N} -C₁₋₄alkylaminosulphonyl, \underline{N} , \underline{N} -di(C_{1-4} alkyl)aminosulphonyl, \underline{C}_{1-4} alkylsulphonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl, imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C_{1-3} alkyl, C_{1-3} alkoxy, C_{1-3} alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C_{1-4} alkoxycarbonyl, and R^1 , R^2 , R^3 , R^4 are independently selected from halogeno, cyano, nitro, C_{1-3} alkylsulphanyl, -N(OH) R^{14} , [[(]]wherein R^{14} is hydrogen, or C_{1-3} alkyl, [[)]], or R^{16} X¹- wherein X¹

- R', R', R' are independently selected from halogeno, cyano, nitro, C₁₋₃alkylsulphanyl, -N(OH)R¹⁴, [[(]]wherein R¹⁴ is hydrogen, or C₁₋₃alkyl, [[)]], or R¹⁶X¹- wherein X¹ represents a direct bond, -O-, -CH₂-, -OC(O)-, -C(O)-, -S-, -SO-, -SO₂-, -NR¹⁷C(O)-, -C(O)NR¹⁸-, -SO₂NR¹⁹-, -NR²⁰SO₂- or -NR²¹-, [[(]]wherein R¹⁷, R¹⁸, R¹⁹, R²⁰ and R²¹ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl, [[)]], and R¹⁶ is hydrogen, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted alkoxy.
- 2. (previously presented) A compound according to claim 1 wherein at least one group R¹, R², R³, R⁴ is a group R¹⁶X¹- and R¹⁶ is hydrogen, an optionally substituted hydrocarbyl group selected from alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl, cycloalkenyl or cycloalkynyl, or combinations thereof; or an optionally substituted heterocyclyl group of from 4 to 20 ring atoms, and where the optional substituents comprise at least one functional group selected from nitro, cyano, halo, oxo, =CR⁷⁸R⁷⁹, C(O)_xR⁷⁷, OR⁷⁷, S(O)_yR⁷⁷, NR²⁸R⁷⁹, C(O)NR²⁸R⁷⁹, OC(O)NR²⁸R⁷⁹, OC(O)NR²⁸R²⁹, -N=CR²⁸R²⁹, S(O)_yNR²⁸R²⁹ or -NR²⁷S(O)_yR²⁸ where R⁷⁷, R²⁸ and R²⁹ are independently selected from hydrogen, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted alkoxy, or R²⁸ and R²⁹ together form an optionally substituted ring which optionally contains further heteroatoms, where x is an integer of 1 or 2, y is 0 or an integer of 1-3.
- 3. (currently amended) A compound according to claim 2 where hydrocarbyl, heterocyclyl or alkoxy groups R⁷⁷, R⁷⁸ and R⁷⁹ as well as rings formed by R⁷⁸ and R⁷⁹ are optionally substituted by halo, perhaloalkyl, mercapto, alkylthio, hydroxy, carboxy, alkoxy, heteroaryl,

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heteroaryloxy, cycloalkyl, cycloalkenyl, cycloalkynyl, alkenyloxy, alkynyloxy, alkoxyalkoxy, aryloxy (where the aryl group may be substituted by halo, nitro, or hydroxy), cyano, nitro, amino, mono- or di-alkyl amino, oximino or S(O)_yR⁹⁰, where the aryl group may be substituted by halo, nitro, or hydroxy and where y is as defined in claim 2 and R⁹⁰ is a alkyl.

- 4. (previously presented) A compound according to claim 2 wherein at least one group R^1 , R^2 , R^3 , R^4 is a group $R^{16}X^1$ and R^{16} is hydrogen or an alkyl group, optionally substituted with one or more groups selected from functional groups as defined in claim 2, or alkenyl, alkynyl, aryl, heterocyclyl, cycloalkyl, cycloalkenyl or cycloalkynyl, any of which may be substituted with a functional group as defined in claim 2, and where any aryl, heterocyclyl, cycloalkyl, cycloalkynyl groups may also be optionally substituted with hydrocarbyl.
- 5. (currently amended) A compound according to claim 1 wherein at least one of R^1 , R^2 , R^3 and R^4 is a group $R^{16}X^1$ where X^1 is as defined in claim 1 and R^{16} is selected from one of the following twenty-two groups:
 - 1) hydrogen or C₁₋₅alkyl which may be unsubstituted or which may be substituted with one or more functional groups;
 - 2) $-R^{2}X^{2}C(O)R^{22}$; [[(]]wherein X^{2} represents -O- or $-NR^{23}$ -, [[(]]in which R^{23} represents hydrogen[[,]] or alkyl optionally substituted with a functional group, [[)]] and R^{22} represents C_{1-3} alkyl, $-NR^{24}R^{25}$ or $-OR^{26}$, [[(]]wherein R^{24} , R^{25} and R^{26} which may be the same or different each represents hydrogen[[,]] or alkyl optionally substituted with a functional group[[))];
 - 3) -R^bX³R²⁷; [[(]]wherein X³ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR²⁸C(O)-, -NR²⁸C(O)O-, -C(O)NR²⁹-, -C(O)ONR²⁹-, -SO₂NR³⁰-, -NR³¹SO₂- or -NR³²-, [[(]]wherein R²⁸, R²⁹, R³⁰, R³¹ and R³² each independently represents hydrogen[[,]] or alkyl optionally substituted with a functional group, [[)]] and R²⁷ represents hydrogen, hydrocarbyl or a saturated heterocyclic group, wherein the hydrocarbyl or heterocyclic groups may be optionally substituted by one or more functional groups and the heterocyclic groups may additionally be substituted by a hydrocarbyl group[[)]];
 4) -R^cX⁴R^{c'} X⁵R³⁵; [[(]]wherein X⁴ and X⁵ which may be the same or different are each -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR³⁶C(O)-, -NR³⁶C(O)O-, -C(O)NR³⁷-,

- -C(O)ONR³⁷- -SO₂NR³⁸-, -NR³⁹SO₂- or -NR⁴⁰-, [[(]]wherein R³⁶, R³⁷, R³⁸, R³⁹ and R⁴⁰ each independently represents hydrogen or alkyl optionally substituted by a functional group, [[)]] and R³⁵ represents hydrogen[[,]] or alkyl optionally substituted by a functional group[[)];
- 5) R⁴¹; wherein R⁴¹ is a C₁₆ cycloalkyl or saturated heterocyclic ring [[(]]linked via carbon or nitrogen[[)]], which cycloalkyl or heterocyclic group may be substituted by one or more functional groups or by a hydrocarbyl or heterocyclyl group which hydrocarbyl or heterocyclyl group may be optionally substituted by one or more functional groups;
- 6) $-R^dR^{41}$; [[(]]wherein R^{41} is as defined hereinbefore[[)]];
- 7) ReR41; [[(]] wherein R41 is as defined hereinbefore[[)]];
- 8) -R^f R⁴¹; [[(]]wherein R⁴¹ is as defined hereinbefore[[)]];
- 9) R⁴²; wherein R⁴² represents an aryl group or an aromatic heterocyclic group [[(]]linked via carbon or nitrogen[[)]] with 1-3 heteroatoms selected from O, N and S, which aryl or aromatic heterocyclic group may be substituted by one or more functional groups or by a hydrocarbyl group optionally substituted by one or more functional groups or heterocyclyl groups, or by a heterocyclyl group optionally substituted by one or more functional groups or hydrocarbyl groups;
- 10) -R^gR⁴² (wherein R⁴² is as defined hereinbefore);
- 11) -RhR⁴² (wherein R⁴² is as defined hereinbefore);
- 12) -Ri R42 (wherein R42 is as defined hereinbefore);
- 13) -R^j X⁶R⁴² (wherein X⁶ represents -O-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁴⁷C(O)-, -C(O)NR⁴⁸-, -C(O)ONR⁴⁸-, -SO₂NR⁴⁹-, -NR⁵⁰SO₂- or -NR⁵¹- (wherein R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰ and R⁵¹ each independently represents hydrogen, or alkyl optionally substituted with a functional group) and R⁴² is as defined hereinbefore);
- 14) $-R^k X^7 R^{42}$; [[(]]wherein X^7 represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁵²C(O)-, -C(O)NR⁵³-, C(O)ONR⁵³-, -SO₂NR⁵⁴-, -NR⁵⁵SO₂- or -NR⁵⁶-, [[(]]wherein R^{52} , R^{53} , R^{54} , R^{55} and R^{56} each independently represents hydrogen[[,]] or alkyl optionally substituted with a functional group, [[)]] and R^{42} is as defined hereinbefore[[)];
- 15) $-R^m X^8 R^{42}$; [[(]]wherein X^8 represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁵⁷C(O)-, -C(O)NR⁵⁸-, -C(O)ONR⁵⁸-, -SO₂NR⁵⁹-, -NR⁶⁰SO₂- or -NR⁶¹-, [[(]]wherein R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰ and R⁶¹ each independently represents hydrogen, hydrogen, or alkyl

optionally substituted with a functional group, [[)]] and R⁴² is as defined. hereinbefore[[)];

- 16) -Rⁿ X⁹Rⁿ'R⁴²; [[(]]wherein X⁹ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁶²C(O)-, -C(O)NR⁶³-, -C(O)ONR⁶³-, -SO₂NR⁶⁴-, -NR⁶⁵SO₂- or -NR⁶⁶-, [[(]]wherein R⁶², R⁶³, R⁶⁴, R⁶⁵ and R⁶⁶ each independently represents hydrogen, hydrogen, or alkyl optionally substituted with a functional group, [[)] and R⁴² is as defined hereinbefore[[)];
- 17) $-R^p X^9 R^{p'} R^{41}$; [[(]] wherein X^9 and R^{41} are as defined hereinbefore[[)]];
- 18) C₂₋₅alkenyl which may be unsubstituted or which may be substituted with one or more functional groups;
- 19) C₂₋₅alkynyl which may be unsubstituted or which may be substituted with one or more functional groups;
- 20) -R'X9R'R41; [[(]]wherein X9 and R41 are as defined hereinbefore[[)]];
- 21) $-R^u X^9 R^{u'} R^{41}$; [[(]]wherein X^9 and R^{41} are as defined hereinbefore[[)]]; and
- 22) R^v R⁶⁷(R^{v'})_q(X⁹)_rR⁶⁸; [[(]]wherein X⁹ is as defined hereinbefore, q is 0 or 1, r is 0 or 1, and R⁶⁷ is a C₁₋₃alkylene group or a cyclic group selected from divalent cycloalkyl or heterocyclic group, which C₁₋₃alkylene group may be substituted by one or more functional groups and which cyclic group may be substituted by one or more functional groups or by a hydrocarbyl group optionally substituted by one or more functional groups or heterocyclyl groups, or by a heterocyclyl group optionally substituted by one or more functional groups or hydrocarbyl groups; and R⁶⁸ is hydrogen, C₁₋₃alkyl, or a cyclic group selected from cycloalkyl or heterocyclic group, which C₁₋₃alkylene group may be substituted by one or more functional groups and which cyclic group may be substituted by one or more may be substituted by one or more functional groups or by a hydrocarbyl group optionally substituted by one or more functional groups or heterocyclyl groups, or by a heterocyclyl group optionally substituted by one or more functional groups or hydrocarbyl groups or hydro

and wherein R^a, R^b, R^c, R^c, R^d, R^g, R^j, Rⁿ, R^{n'} R^p, R^{p'}, R^{t'}, R^{u'}, R^v and R^{v'} are independently selected from C_{1.8}alkylene groups optionally substituted by one or more functional groups,

- R^e R^h , R^k and R^t are independently selected from C_{2-8} alkenylene groups optionally substituted by one or more functional groups, and R^f , R^i , R^m and R^u are independently selected from by C_{2-8} alkynylene groups optionally substituted by one or more functional groups.
- 6. (currently amended) A compound according to claim 1, wherein R¹⁶ is selected from one of the following twenty-two groups:
 - 1) hydrogen or C₁₋₅alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, oxiranyl, fluoro, chloro, bromo, amino, C₁₋₃alkyl, and trifluoromethyl;
 - 2) $-R^2X^2C(O)R^{22}$; [[(]]wherein X^2 represents -O- or -NR²³-, [[(]]in which R²³ represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl) and R²² represents C_{1-3} alkyl, -NR²⁴R²⁵ or -OR²⁶, [[(]]wherein R²⁴, R²⁵ and R²⁶ which may be the same or different each represents hydrogen, C_{1-5} alkyl, hydroxy C_{1-5} alkyl or C_{1-3} alkoxy C_{2-3} alkyl[[))];
 - 3) $-R^bX^3R^{27}$; [[(]]wherein X^3 represents -O-, C(O) -S-, -SO-, -SO₂-, -OC(O)-, $-NR^{28}C(O)$ -, $-NR^{28}C(O)O$ -, $-C(O)NR^{29}$ -, $C(O)ONR^{29}$ -, $-SO_2NR^{30}$ -, $-NR^{31}SO_2$ - or $-NR^{32}$ -, [[(]]wherein R²⁸, R²⁹, R³⁰, R³¹ and R³² each independently represents hydrogen, C₁₋₃alkyl, hydroxy C₁₋₄alkyl or C₁₋₃alkoxyC₂₋₃alkyl, [[)]] and R²⁷ represents hydrogen, C₁₋₆alkyl, C₂₋ 6alkenyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₆alkyl group may bear 1, 2 or 3 substituents selected from oxo, hydroxy, halogeno, cyclopropyl, amino, C₁₋₄alkylamino, C₁₋₄alkanoyldi-C₁₋₄alkylamino, C1.4alkylthio, C1.4alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C₁₋₄cyanoalkyl, C₁₋₄alkyl, C₁₋₄hydroxyalkyl, C₁₋₄alkoxy, C₁₋₄alkoxyC₁₋₄alkyl, C₁₋₄alkylsulphonylC₁₋₄alkyl, C₁₋₄alkoxycarbonyl, C₁₋₄aminoalkyl, C₁₋₄alkylamino, di(C₁₋₄alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, di(C₁4alkyl)aminoC₁4alkyl, C₁4alkylaminoC₁4alkoxy, di(C₁4alkyl)aminoC₁4alkoxy and a group -(-O-)₁(R^{b'})₂D₂ [[(]]wherein f is 0 or 1, g is 0 or 1 and D is a cyclic group selected from C_{3.6}cycloalkyl group, an aryl group or a 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo or C₁₋₄alkyl[[))]];

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4) -R^cX⁴R^c X⁵R³⁵; [[(]]wherein X⁴ and X⁵ which may be the same or different are each -O-, C(O), -S-, -SO-, -SO₂-, -NR³⁶C(O)-, -NR³⁶C(O)O-, -C(O)NR³⁷-, -C(O)ONR³⁷-, -SO₂NR³⁸-, -NR³⁹SO₂- or -NR⁴⁰-, [[(]]wherein R³⁶, R³⁷, R³⁸, R³⁹ and R⁴⁰ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl, [[]] and R³⁵ represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl[])]; 5) R⁴¹; [[(]]wherein R⁴¹ is a 4-6-membered cycloalkyl or saturated heterocyclic ring, [[(]]linked via carbon or nitrogen, [[)]] with 1-2 heteroatoms, selected independently from O, S and N, which cycloalkyl or heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C₁₋₄alkyl, hydroxyC₁₋₄alkyl, cyanoC₁₋₄alkyl, cyclopropyl, C₁₋₄alkylsulphonylC₁₋₄alkyl, C₁₋₄alkoxycarbonyl, carboxamido, C₁₋₄aminoalkyl, C₁₋₄alkylamino, di(C₁₋₄alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, C_{14} alkanoyl, di(C_{14} alkyl)amino C_{14} alkyl, C_{14} alkylamino C_{14} alkoxy, di(C₁₋₄alkyl)aminoC₁₋₄alkoxy nitro, amino, C₁₋₄alkoxy, C₁₋₄hydroxyalkoxy, carboxy, trifluoromethyl, $-C(O)NR^{43}R^{44}$, $-NR^{45}C(O)R^{46}$, [[(]]wherein R^{43} , R^{44} , R^{45} and R^{46} , which may be the same or different, each represents hydrogen, C1-4alkyl, hydroxyC1-4alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and a group -(-O-)₁(C₁₋₄alkyl)₀-ringD, [[(]]wherein f is 0 or 1, g is 0 or 1 and D is a cyclic group selected from C₃₋₆cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4} alkyl[[))]];

- 6) -R^dR⁴¹; [[(]]wherein R⁴¹ is as defined hereinbefore[[)]];
- 7) R^eR⁴¹; [[(]]wherein R⁴¹ is as defined hereinbefore[[)]];
- 8) -R^f R⁴¹; [[(]]wherein R⁴¹ is as defined hereinbefore[[)]];
- 9) R⁴²; wherein R⁴² represents a phenyl group or a 5-6-membered aromatic heterocyclic group, [[()]linked via carbon or nitrogen, [[()]] with 1-3 heteroatoms selected from O, N and S, which; phenyl or aromatic heterocyclic group may carry up to 5 substituents selected from hydroxy, nitro, halogeno, amino, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄hydroxyalkyl, C₁₋₄aminoalkyl, C₁₋₄alkylamino, C₁₋₄hydroxyalkoxy, oxo, cyanoC₁₋₄alkyl, cyclopropyl, C₁₋₄alkylsulphonylC₁₋₄alkyl, C₁₋₄alkoxycarbonyl, di(C₁₋₄alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, C₁₋₄alkanoyl, di(C₁₋₄alkyl)aminoC₁₋₄alkyl,

C₁-alkylaminoC₁-alkoxy, di(C₁-alkyl)aminoC₁-alkoxy, carboxy, carboxamido,

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trifluoromethyl, cyano, -C(O)NR⁶⁹R⁷⁰, -NR⁷¹C(O)R⁷², [[()]wherein R⁶⁹, R⁷⁰, R⁷¹ and R⁷², which may be the same or different, each represents hydrogen, C₁₋₄alkyl, hydroxy C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl, [[]]] and a group -(-O-) $_1$ (C_{1-4} alkyl) $_2$ ring D_3 [[(]]wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C₁₋₆cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C1.4alkyl[[]];

- 10) -R⁸R⁴²; [[(]]wherein R⁴² is as defined hereinbefore[[)]];
- 11) -RhR⁴²; [[(]]wherein R⁴² is as defined hereinbefore[[)]];
- 12) -Rⁱ R⁴²; [[(]]wherein R⁴² is as defined hereinbefore[[)]];
- 13) $-R^{j} X^{6} R^{42}$; [[(]] wherein X^{6} represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁴⁷C(O)-, -C(O)NR⁴⁸-, C(O)ONR⁴⁸-, -SO₂NR⁴⁹-, -NR⁵⁰SO₂- or -NR⁵¹-, [[(]]wherein R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰ and R⁵¹ each independently represents hydrogen, C₁₋₃alkyl,

hydroxyC_{1.3}alkyl or C_{1.3}alkoxyC_{2.3}alkyl, [[]]] and R⁴² is as defined hereinbefore[[]];

- 14) $-R^k X^7 R^{42}$; [[(]]wherein X^7 represents -O-, C(O), -S-, -SO-, -SO₂-, -NR⁷³C(O)-,
- -C(O)NR⁷⁴-, C(O)ONR⁷⁴-, -SO₂NR⁷⁵-, -NR⁷⁶SO₂- or -NR⁷⁷-, [[(]]wherein R⁷³, R⁷⁴, R⁷⁵,
- R⁷⁶ and R⁷⁷ each independently represents hydrogen, C_{1.3}alkyl, hydroxyC_{1.3}alkyl or
- C₁₋₃alkoxyC₂₋₃alkyl, [[)]] and R⁴² is as defined hereinbefore[[)]];
- 15) -R^mX⁸R⁴²; [[()]wherein X⁸ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -NR⁵⁷C(O)-,
- -C(O)NR⁵⁸-, -SO₂NR⁵⁹-, -NR⁶⁰SO₂- or -NR⁶¹-, [[(]]wherein R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰ and R⁶¹

each independently represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or

 C_{1-3} alkoxy C_{2-3} alkyl, [[)]] and R^{42} is as defined hereinbefore[[)]];

- 16) $-R^n X^9 R^n R^{42}$; [[(]] wherein X^9 represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -NR⁶²C(O)-,
- -C(O)NR⁶³-, C(O)ONR⁶³-, -SO₂NR⁶⁴-, -NR⁶⁵SO₂- or -NR⁶⁶-, [[(]]wherein R⁶², R⁶³, R⁶⁴,
- R⁶⁵ and R⁶⁶ each independently represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or
- C₁₋₃alkoxyC₂₋₃alkyl, [[)]] and R⁴² is as defined hereinbefore[[)]]:
- 17) -R^p X⁹-R^p IR⁴¹; [[(]]wherein X⁹ and R⁴¹ are as defined hereinbefore[[)]];
- 18) C₂₋₅alkenyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro, amino, C1-4alkylamino,
- N,N-di(C₁₋₄alkyl)amino, aminosulphonyl, N-C₁₋₄alkylaminosulphonyl and $N,N-di(C_{1-4}alkyl)$ aminosulphonyl;

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19) C_{2.5}alkynyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro, amino, C₁₋₄alkylamino, N,N-di(C₁₋₄alkyl)amino, aminosulphonyl, N-C₁₋₄alkylaminosulphonyl and $N,N-di(C_{1-4}alkyl)$ aminosulphonyl; 20) $-R^{t}X^{9}R^{t}R^{41}$; [[(]]wherein X^{9} and R^{41} are as defined hereinbefore[[)]]; 21) -R^u X⁹ R^u'R⁴¹; [[(]] wherein X⁹ and R⁴¹ are as defined hereinbefore[[)]]; and 22) - $R^{\nu} R^{67} (R^{\nu})_{\alpha} (X^9)_{r} R^{68}$; [[()] wherein X^9 is as defined hereinbefore, q is 0 or 1, r is 0 or 1, and R⁶⁷ is a C_{1.3}alkylene group or a cyclic group selected from cyclopropyl, cyclobutyl, cyclopentylene, cyclohexylene or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₃alkylene group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno and C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{1.4}cyanoalkyl, C_{1.4}alkyl, C_{1.4}hydroxyalkyl, C_{1.4}alkoxy, C₁4alkoxyC₁4alkyl, C₁4alkylsulphonylC₁4alkyl, C₁4alkoxycarbonyl, C₁4aminoalkyl, C₁₋₄alkylamino, di(C₁₋₄alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, di(C₁₋₄alkyl)aminoC₁₋₄alkyl, C₁₋₄alkylaminoC₁₋₄alkoxy, di(C₁₋₄alkyl)aminoC₁₋₄alkoxy and a group -(-O-)₁(C₁₋₄alkyl)₂ringD, [[(]]wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C₃₋₆cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C₁₋₄alkyl[[)]; and R⁶⁸ is hydrogen, C₁₋₃alkyl, or a cyclic group selected from cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl and a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₃alkyl group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C₁₋₄cyanoalkyl, C₁₋₄alkyl, C₁₋₄hydroxyalkyl, C₁₋₄alkoxy, C₁₋₄alkoxyC₁₋₄alkyl, C₁₋₄alkylsulphonylC₁₋₄alkyl, C₁₋₄alkoxycarbonyl, C₁₋₄aminoalkyl, C₁₋₄alkylamino, di(C₁₋₄alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, di(C₁₋₄alkyl)aminoC₁₋₄alkyl, C₁₋₄alkylaminoC₁₋₄alkoxy, di(C₁₋₄alkyl)aminoC₁₋₄alkoxy and a group -(-O-)₁(C₁₋₄alkyl)_gringD₂ [[(]] wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group

selected from C₃₋₆cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic

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group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4} alkyl[[]]; and wherein R^a , R^b , R^b , R^c , R^c , R^c , R^g , R^g , R^n , R^n , R^p , R^p , R^p , R^n ,

R^e R^h, R^k and R^t are independently selected from C₂₋₈alkenylene groups optionally substituted by by one or more substituents selected from hydroxy, halogeno, amino, and R^t may additionally be a bond; and

R^f, Rⁱ, R^m and R^u are independently selected from by C₂₋₈alkynylene groups optionally susbstituted by one or more substituents selected from hydroxy, halogeno, amino.

7. (currently amended) A compound of formula (IA)

$$R^8$$
 R^7
 R^6
 R^5
 R^9
 R^4
(IA)

or a salt, ester or amide thereof;

where X is O, or S, S(O) or S(O)₂, NH or NR¹⁰ where R¹⁰ is hydrogen or C₁₋₆alkyl; R⁵ is a group OR¹¹, NR¹²R¹³ or SR¹¹ where R¹¹, R¹² and R¹³ are independently selected from hydrogen, optionally substituted hydrocarbyl or optionally substituted heterocyclic groups, and R¹² and R¹³ may additionally form together with the nitrogen atom to which they are attached, an aromatic or non-aromatic heterocyclic ring which may contain further heteroatoms,

R⁸ and R⁹ are independently selected from hydrogen, halo, C₁₋₄alkyl, C₁₋₄ alkoxy, C₁₋₄alkoxymethyl, di(C₁₋₄alkoxy)methyl, C₁₋₄alkanoyl, trifluoromethyl, cyano, amino, C₂₋₅alkenyl, C₂₋₅alkynyl, a phenyl group, a benzyl group or a 5-6-membered heterocyclic

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group with 1-3 heteroatoms, selected independently from O, S and N, which heterocyclic group may be aromatic or non-aromatic and may be saturated, [[(]]linked via a ring carbon or nitrogen atom, [[)]] or unsaturated, [[(]]linked via a ring carbon atom[[)]], and which phenyl, benzyl or heterocyclic group may bear on one or more ring carbon atoms up to 5 substituents selected from hydroxy, halogeno, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C₂-4alkanoyl, C₁-4alkanoylamino, C₁-4alkoxycarbonyl, C₁-4alkylsulphanyl, C₁-4alkylsulphanyl, C₁-4alkylsulphonyl, carbamoyl, N-C₁-4alkylcarbamoyl,

N,N-di(C₁₋₄alkyl)carbamoyl, aminosulphonyl, N-C₁₋₄alkylaminosulphonyl, N,N-di(C₁₋₄alkyl)aminosulphonyl, C₁₋₄alkylsulphonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl, imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C₁₋₄alkoxycarbonyl, and R¹, R², R³, R⁴ are independently selected from, halo, cyano, nitro, trifluoromethyl, C₁₋₃alkyl, -NR¹⁴R¹⁵, [[(]]wherein R¹⁴ and R¹⁵, which may be the same or different, each represents hydrogen or C₁₋₃alkyl[[)]], or -X¹R¹⁶, [[(]]wherein X¹ represents a direct bond, -O-, -CH₂-, -OCO-, carbonyl, -S-, -SO-, -SO₂-, -NR¹⁷CO-, -CONR¹⁸-, -SO₂NR¹⁹-, -NR²⁰SO₂- or -NR²¹-, [[(]]wherein R¹⁷, R¹⁸, R¹⁹, R²⁰ and R²¹ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl[[)]], R¹⁶ is selected from one of the following seventeen groups:

- 1') hydrogen or C_{1.5}alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro or amino,
- 2') C_{1-5} alkyl X^2 COR²²; [[(]]wherein X^2 represents -O- or -NR²³-, [[(]]in which R²³ represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl, [[)]] and R²² represents C_{1-3} alkyl, -NR²⁴R²⁵ or -OR²⁶, [[(]]wherein R²⁴, R²⁵ and R²⁶ which may be the same or different each represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl[))];
- 3') C₁₋₅alkylX³R²⁷; [[(]]wherein X³ represents -O-, -S-, -SO-, -SO₂-, -OCO-, -NR²⁸CO-, -CONR²⁹-, -SO₂NR³⁰-, -NR³¹SO₂- or -NR³²-, [[(]]wherein R²⁸, R²⁹, R³⁰, R³¹ and R³² each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl, [[)]] and R²⁷ represents hydrogen, C₁₋₃alkyl, cyclopentyl, cyclohexyl or a 5-6-membered saturated

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heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₃alkyl group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno and C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkyl, C₁₋₄hydroxyalkyl and C₁₋₄alkoxy);

- 4') C₁₋₅alkylX⁴C₁₋₅alkylX⁵R³⁵; [[()]wherein X⁴ and X⁵ which may be the same or different are each -O-, -S-, -SO-, -SO₂-, -NR³⁶CO-, -CONR³⁷-, -SO₂NR³⁸-, -NR³⁹SO₂- or -NR⁴⁰-, [[()]wherein R³⁶, R³⁷, R³⁸, R³⁹ and R⁴⁰ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl, [[)]] and R³⁵ represents hydrogen or C₁₋₃alkyl[[)]]; 5') R⁴¹; [[()]wherein R⁴¹ is a 5-6-membered saturated heterocyclic group, [[()]linked via carbon or nitrogen, [[)]] with 1-2 heteroatoms, selected independently from O, S and N, which heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkyl, C₁₋₄hydroxyalkyl, C₁₋₄alkoxy, C₁₋₄alkoxyC₁₋₄alkyl and C₁₋₄alkylsulphonylC₁₋₄alkyl[[)]];
- 6') C₁₋₅alkylR⁴¹; [[(]]wherein R⁴¹ is as defined hereinbefore[[)]];
- 7') C_{2-5} alkenyl R^{41} ; [[(]]wherein R^{41} is as defined hereinbefore[[)]];
- 8') C₂₋₅alkynylR⁴¹; [[(]]wherein R⁴¹ is as defined hereinbefore[[)]];
- 9') R⁴²; [[(]]wherein R⁴² represents a phenyl group or a 5-6-membered aromatic heterocyclic group, [[(]]linked via carbon or nitrogen, [[)]] with 1-3 heteroatoms selected from O, N and S, which phenyl or aromatic heterocyclic group may carry up to 5 substituents on an available carbon atom selected from hydroxy, halogeno, amino, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄hydroxyalkyl, C₁₋₄aminoalkyl, C₁₋₄alkylamino, C₁₋₄hydroxyalkoxy, carboxy, trifluoromethyl, cyano, -CONR⁴³R⁴⁴ and -NR⁴⁵COR⁴⁶, [[(]]wherein R⁴³, R⁴⁴, R⁴⁵ and R⁴⁶, which may be the same or different, each represents hydrogen, C₁₋₄alkyl or C₁₋₃alkoxyC₂₋₃alkyl[[))];
- 10') C₁₋₅alkylR⁴²; [[(]]wherein R⁴² is as defined hereinbefore[[)]];
- 11') C₂₋₅alkenylR⁴²; [[(]]wherein R⁴² is as defined hereinbefore[[)]];
- 12') C₂₋₅alkynylR⁴²;[[(]]wherein R⁴² is as defined hereinbefore[[)]];
- 13') $C_{1.5}$ alkyl X^6R^{42} ; [[(]]wherein X^6 represents -O-, -S-, -SO-, -SO₂-, -NR⁴⁷CO-, -CONR⁴⁸-, -SO₂NR⁴⁹-, -NR⁵⁰SO₂- or -NR⁵¹-, [[(]]wherein R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰ and R⁵¹ each independently represents hydrogen, $C_{1.3}$ alkyl or $C_{1.3}$ alkoxy $C_{2.3}$ alkyl, [[)] and R⁴² is as defined hereinbefore[[)];

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14') C_{2-5} alkenyl X^7R^{42} ; [[(]]wherein X^7 represents -O-, -S-, -SO-, -SO₂-, -NR⁵²CO-, -CONR⁵³-, -SO₂NR⁵⁴-, -NR⁵⁵SO₂- or -NR⁵⁶-, [[(]]wherein R⁵², R⁵³, R⁵⁴, R⁵⁵ and R⁵⁶ each independently represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl, [[)]] and R⁴² is as defined hereinbefore[[)]];

15') C_{2-5} alkynyl X^8R^{42} ; [[(]]wherein X^8 represents -O-, -S-, -SO-, -SO₂-, -NR⁵⁷CO-, -CONR⁵⁸-, -SO₂NR⁵⁹-, -NR⁶⁰SO₂- or -NR⁶¹-, [[(]]wherein R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰ and R⁶¹ each independently represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl, [[)] and R⁴² is as defined hereinbefore[[)];

16') C_{1-3} alkyl X^9C_{1-3} alkyl R^{42} ; [[(]]wherein X^9 represents -O-, -S-, -SO-, -SO₂-, -NR⁶²CO-, -CONR⁶³-, -SO₂NR⁶⁴-, -NR⁶⁵SO₂- or -NR⁶⁶-, [[(]]wherein R⁶², R⁶³, R⁶⁴, R⁶⁵ and R⁶⁶ each independently represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl, [[)] and R^{42} is as defined hereinbefore[[)]]; and

17') C_{1-3} alkyl X^9C_{1-3} alkyl R^{41} ; [[()]wherein X^9 and R^{41} are as defined hereinbefore[[)]]; and R^6 and R^7 are hydrogen or C_{1-4} alkyl.

- 8. (previously presented) A compound according to claim 7 wherein R⁶ and R⁷ are hydrogen.
- 9. (previously presented) A compound according to claim 7 of formula (IB)

(IB)

where X, R', R2, R3, R4, R5, R6, R7, R8 and R9 are as defined in claim 7.

- 10. (currently amended) A compound according to claim 6, wherein R^3 is selected from a group OR^{11} where R^{11} is hydrogen or C_{1-4} alkyl; or a group $NR^{12}R^{13}$ where one of R^{12} or R^{13} is hydrogen and the other is optionally substituted C_{1-6} alkyl, optionally substituted aryl or optionally substituted heterocyclyl, or R^{12} and R^{13} together with the nitrogen atom to which they are attached from form a heterocylic ring.
- 11. (previously presented) A compound according to claim 10, which is a phosphate ester of a compound of formula (I).
- 12. (previously presented) A method for preparing a compound of formula (I) as defined in claim 1 which method comprises reacting a compound of formula (II)

(II)

where X, R⁸ and R⁹ are as defined in claim 1, R¹, R², R³, R⁴ are groups R¹, R², R³, R⁴ as defined in claim 1 respectively; and R⁸⁵ is a leaving group, with a compound of formula (III)

where R⁶ are R⁷ are as defined in claim 1 and R⁵, is a group as defined in claim 1.

13. (cancelled)

- 14. (previously presented) A method for treating colorectal or breast cancer in a warm blooded animal, in need of such treatment, which comprises administering to said animal an effective amount of a compound of formula (I), or a salt, ester, or amide thereof.
- 15. (previously presented) A pharmaceutical composition comprising a compound of formula (I) as defined in claim 1 or a salt, ester, or amide thereof, in combination with a pharmaceutically acceptable carrier.
- 16. (currently amended) A compound according to claim 10 or a salt, ester or amide thereof; where X is as defined in claim 1 and R¹, R², R³, R⁴ are as defined in claim 6; and

R⁵ is a group OR¹¹, NR¹²R¹³ or SR¹¹ where R¹¹ is hydrogen or C₁₋₄alkyl, and where one of R¹² and R¹³ is hydrogen and the other is C₁₋₆alkyl optionally substituted with one or more groups selected from hydroxy, trifluoromethyl, C₁₋₃alkoxy, cyano, amino, mono- or di-C₁₋₄alkylamino, C₁₋₄alkylthio, C₃₋₆cycloalkyl or heterocyclyl optionally substituted with C₁₋₄alkyl; or one of R¹² and R¹³ is hydrogen and the other is a heterocyclic group as well as dioxides thereof, C₃₋₆cycloalkyl or a phenyl group any of which may be substituted with one or more groups selected from halo, nitro, C₁₋₄alkyl or C₁₋₄alkoxy, and R¹² and R¹³ may additionally form together with the nitrogen atom to which they are attached, morpholine or piperidine,

R⁶ and R⁷ are independently selected from hydrogen or C₁₋₄alkyl;
R⁸ and R⁹ are independently selected from hydrogen, halo, C₁₋₄ alkoxy, trifluoromethyl, cyano or phenyl.

- 17. (previously presented) A compound according to claim 16 wherein X is NH or O.
- 18. (currently amended) A compound according to claim 16 wherein R¹ is hydrogen,
 R² is halo, cyano, nitro, trifluoromethyl, C₁₋₃alkyl, -NR¹⁴R¹⁵, [[(]]wherein R¹⁴ and R¹⁵,
 which may be the same or different, each represents hydrogen or C₁₋₃alkyl[[)]], or a group
 -X¹R¹⁶ where X¹ is oxygen and R¹⁶ is a group (1) as defined in claim 6,

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 R^3 is a group $-X^1R^{16}$ where X^1 is oxygen and R^{16} is a group selected from group (1), (3), (6) and (10) as defined in claim 6 and R^4 is hydrogen, halo, C_{1-4} alkyl, or C_{1-4} alkoxy.

- 19. (previously presented) A compound according to claim 16 wherein R^2 and R^3 are independently methoxy or 3,3,3-trifluoroethoxy.
- 20. (previously presented) A compound according to claim 16 wherein R³ is 3-morpholinopropoxy.
- 21. (previously presented) A compound according to claim 16 wherein R^8 and R^9 are both hydrogen.
- 22. (previously presented) A compound according to claim 16 wherein R⁶ and R⁷ are both hydrogen.